

## CLAIMS

We claim:

1        1. A digital camera that fits within the film cavity of a non-digital  
2        camera comprising:

3            a light detector for detecting light due to the opening of the shutter  
4        aperture of the non-digital camera; and

5            an imager coupled to the light detector and located adjacent to the  
6        shutter aperture of the non-digital camera, said imager sensing radiated  
7        energy reflective of the image received through a lens and shutter aperture of  
8        the non-digital camera when the light detector detects light due to the  
9        opening of the shutter aperture of the non-digital camera, said imager  
10      generating signals reflective of the image.

1        2. The digital camera as set forth in claim 1, further comprising a  
2        memory for storing digital data reflective of the image.

1        3. The digital camera as set forth in claim 1, further comprising a  
2        passgate coupled to the light detector located between the imager and a clock  
3        input to the imager, said passgate controlled by the light detector such that  
4        when the light detector detects light due to the opening of the shutter  
5        aperture of the non-digital camera, the passgate is switched to permit clock  
6        signals to reach the imager to driver the imager to output signals reflective of  
7        the image.

1        4. The digital camera as set forth in claim 1, wherein the light  
2        detector controls power to the imager such that when the light detector  
3        detects light due to the opening of the shutter aperture of the non-digital

4 camera, power is supplied to the imager to generate signals reflective of the  
5 image.

1 5. The digital camera as set forth in claim 1, wherein the light  
2 detector controls the output from the imager such that when the light  
3 detector detects light due to the opening of the shutter aperture of the non-  
4 digital camera, output signals reflective of the image are output from the  
5 imager.

1 6. The digital camera as set forth in claim 1, further comprising  
2 circuitry for performing signal processing on the signals output by imager.

1 7. The digital camera as set forth in claim 1, further comprising at  
2 least one output port for outputting image data from the digital camera to an  
3 external device.

1 8. The digital camera as set forth in claim 6, wherein the output  
2 port comprises a wireless transmitter for transmitting image data to wireless  
3 receiver of an external device.

1 9. The digital camera as set forth in claim 6, wherein the output  
2 port is coupled to a substantially flat cable that extends outside of the body of  
3 the non-digital camera when a film door of the non-digital camera is closed  
4 and connects to an external device.

1 10. The digital camera as set forth in claim 6, wherein the output  
2 port outputs image in a format compatible with the RS-232 standard.

1       11. The digital camera as set forth in claim 6, wherein the output  
2 port couples to a monitor, said digital camera further comprising circuitry  
3 that drives the monitor to display the image on the monitor.

1       12. The digital camera as set forth in claim 6, wherein the external  
2 device drives a monitor to display the image.

1       13. The digital camera as set forth in claim 6, wherein the external  
2 device drives a printer to generate a print of the image.

1       14. The digital camera as set forth in claim 6, wherein the output  
2 port operates in accordance with a telephone standard, said digital camera  
3 further comprising logic to generate a facsimile transmission that is output  
4 through the output port to a coupled telephone line.

1       15. The digital camera as set forth in claim 6, wherein the output  
2 port couples to the internet.

1       16. The digital camera as set forth in claim 6, wherein the output  
2 port couples to the world wide web.

1       17. The digital camera as set forth in claim 1, further comprising a  
2 lens located between the shutter aperture of the non-digital camera and the  
3 imager to focus the image received through the shutter aperture onto the  
4 imager.

1       18. A method for generating digital images using a non-digital  
2 image camera comprising the steps of:

3       specifying an image to be recorded by actuating the shutter aperture of  
4 the non-digital camera, the actuation of the shutter aperture opening the

5 shutter to permit light reflective of the image to be received in a film cavity of  
6 the non-digital camera;

7 locating an imager and a light detector in the film cavity of the non-  
8 digital camera, said light detector controlling the imager such that the imager  
9 outputs signals reflective of the image sensed when the light detector detects  
10 light due to the opening of the shutter aperture;

11 said imager outputting signals reflective of a digital image sensed.

1 19. The method as set forth in claim 17, further comprising the step  
2 of translating the signals to digital data, said digital data reflective of the  
3 digital image sensed.

1 20. The method as set forth in claim 18, further comprising the step  
2 of formatting the signals reflective of the digital image sensed into data  
3 words.

1 21. The method as set forth in claim 17, further comprising the step  
2 of storing in memory representations of the signals reflective of the image  
3 sensed.

1 22. The method as set forth in claim 17, further comprising the step  
2 of processing the signals reflective of the image sensed to modify the image.

1 23. The method as set forth in claim 17, further comprising the step  
2 of outputting the signals reflective of the image sensed to an external device.

1 24. The method as set forth in claim 22, wherein the external device  
2 is a display device and the step of outputting comprises generating a  
3 signals to drive the device in order to display the image.

1        25. The method as set forth in claim 22, wherein the external device  
2 is a telephone system and the step of outputting comprises sending a  
3 facsimile representation of the image via the telephone system to a facsimile  
4 device.

1        26. The method as set forth in claim 22, wherein the external device  
2 is an interface that transfers the image to other devices.

1        27. The method as set forth in claim 22, wherein the external device  
2 is a system that provides a connection to the internet.

1        28. The method as set forth in claim 22, wherein the external device  
2 is a system that provides a connection to the world wide web.

1        29. The method as set forth in claim 22, wherein the step of  
2 outputting comprises the step of transmitting information to be output via a  
3 wireless connection.